

## ORAL PRESENTATION

## Open Access

# Impact of in-hospital recurrent ischemia event: findings from GULF RACE-2

A Al-Saleh<sup>1\*</sup>, A Hersi<sup>1</sup>, KF Alhabib<sup>1</sup>, AA Alsheikh-Ali<sup>2</sup>, K Sulaiman<sup>3</sup>, H Alfaleh<sup>1</sup>, S Alsaif<sup>4</sup>, W Almahmeed<sup>2</sup>, N Asaad<sup>5</sup>, H Amin<sup>6</sup>, A Al-Motarreb<sup>7</sup>, J Al Suwaidi<sup>5</sup>

From International Conference for Healthcare and Medical Students 2011  
Dublin, Ireland. 4-5 November 2011

## Introduction

Little in the literature is known about the long term outcome of patients with acute coronary syndrome (ACS) and in-hospital recurrent ischemic event. Accordingly; our objectives were to determine the baseline characteristics of patients, the predictors, and the long term outcome of patients with recurrent ischemia.

## Methods

The population compromised 7930 enrolled in the second Gulf Registry of Acute Coronary Events (Gulf RACE-2).

## Results

Out of the 7930 ACS patients, 172 (2.2%) had recurrent myocardial infarction (Re-MI) during their hospital stay. Patients with Re-MI were more likely to be older (mean age  $59.12 \pm 13.5$  vs.  $56.8 \pm 12.4$ ,  $P=0.016$ ), had significantly higher rate of prior history of angina (48% vs. 38.2%,  $P=0.006$ ), and hyperlipidemia (45.2% vs. 37.3%,  $P=0.027$ ) than patients without Re-MI. On admission patients with Re-MI had significantly higher HR, lower systolic BP, Killip class 4 and high GRACE risk score than those without Re-MI (27.3% vs. 17.6%), (11% vs. 4.8%), (8.1% vs. 3.2%), and (31.8% vs. 21.5%,  $P<0.05$  for all comparisons) respectively. Patients with Re-MI had a higher rate of STEMI on admission than patients without Re-MI (72.1% vs. 43.9%;  $P<0.001$ ). Re-MI patients were less likely to receive Aspirin (94.8% vs. 98.5%,  $P=0.002$ ), beta-blockers (95.3% vs. 74.7%,  $P<0.001$ ), and Statin (87.2% vs. 94.9%,  $P<0.001$ ) than patients without Re-MI. Coronary angiogram was less frequently performed on patients with Re-MI than patients without Re-MI (30.8% vs. 32.5%,

$P=0.036$ ). In hospital adverse events including HF, cardiogenic shock, VT/VF were more frequent in the Re-MI group than patients without Re-MI (44.2% vs. 12.4%), (25.6% vs. 5.3%), (7.6% vs. 2.7%;  $P<0.001$  for all comparisons) respectively. In ACS patients with Re-MI in-hospital, 30 days and 1 year were significantly higher than patients without Re-MI (23.8% vs. 4.1%), (28.1% vs. 7.7%), and (31.6% vs. 12.1%;  $P<0.001$  for all comparisons), respectively.

## Conclusions

Recognizing patients at high risk of Re-MI is important as modifying the risk factors, and managing the patient aggressively may reduce the incidence of such events and the associated morbidity and mortality.

## Author details

<sup>1</sup>Department of Cardiac Sciences, College of Medicine, King Saud University, Riyadh, Saudi Arabia. <sup>2</sup>Department of Cardiac Sciences, Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates. <sup>3</sup>Cardiology Department, Royal Hospital, Muscat, Oman. <sup>4</sup>Cardiology Department, Saud Al-Babtain Cardiac Center, Dammam, Saudi Arabia. <sup>5</sup>Department of Cardiology and Cardiovascular Surgery, Hamad Medical Corporation (HMC), Doha, Qatar. <sup>6</sup>Cardiology Department, Mohammed Bin Khalifa Cardiac Center, Manama, Bahrain. <sup>7</sup>Department of Medicine, Faculty of Medicine, Sana'a University, Sana'a, Yemen.

Published: 9 July 2012

doi:10.1186/1753-6561-6-S4-O17

Cite this article as: Al-Saleh et al.: Impact of in-hospital recurrent ischemia event: findings from GULF RACE-2. *BMC Proceedings* 2012 **6** (Suppl 4):O17.

<sup>1</sup>Department of Cardiac Sciences, College of Medicine, King Saud University, Riyadh, Saudi Arabia

Full list of author information is available at the end of the article